

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently amended) Thermal ink jet printhead comprising nozzles, chambers in turn comprising resistors, and a groove, made in a substrate, suitable for fluidly ducting ink to said chambers, an N-well layer positioned for forming a portion of the groove, wherein said groove comprises a first portion produced by means of a dry etching, and a second portion produced by means of an electrochemical etching.
2. (Previously Presented) Printhead according to claim 1, wherein said substrate is made of silicon.
3. (Previously Presented) Printhead according to claim 2, wherein said nozzles and said resistors are disposed in columns parallel to one and the same geometric reference.
4. (Previously Presented) Printhead according to claim 3, wherein said first portion of said groove has a substantially rectangular shape having a greater side parallel to said geometric reference.
5. (Previously Presented) Printhead according to claim 3, wherein said second portion of said groove has a substantially rectangular shape having a greater side parallel to said geometric reference.
6. (Previously Presented) Printhead according to claim 3, wherein said first portion of said groove also comprises a wet etching having a substantially rectangular shape and a greater side parallel to a crystallographic axis of said silicon which constitutes said substrate, and that said crystallographic axis cannot be parallel to said geometric reference.
7. (Cancelled)

8. (Currently amended) Printhead according to claim 1 ~~7~~, further comprising a P+ layer positioned adjacent to the substrate and within the groove between the N-well layer.
9. (Previously Presented) Printhead according to claim 1, further comprising an anti-cavitation layer of electrically conducting material.
10. (Previously Presented) Printhead according to claim 9, wherein said anti-cavitation layer of electrically conducting material forms a single equipotential surface through said head.
11. (Previously Presented) Printhead according to claim 9 wherein said anti-cavitation layer is made of tantalum.
12. (Previously Presented) Printhead according to claim 11, wherein said anti-cavitation layer of tantalum is between 0.4 and 0.6  $\mu\text{m}$  thick.
13. (Previously Presented) Printhead according to claim 9, wherein said anti-cavitation layer is covered by a layer of gold.
14. (Previously Presented) Printhead according to claim 13, wherein said layer of gold is between 100 and 200  $\text{\AA}$  thick.
15. (Previously Presented) Printhead according to claim 9, further comprising a first metal or a second metal and that said first metal or said second metal forms one or more electric contacts with said anti-cavitation layer.

Claims 16-24 (Canceled).

25. (New) A thermal ink jet printhead, comprising:  
at least one nozzle connected to an ink chamber;

a substrate, the substrate having a lower face, an upper face, and a groove for supplying ink, the groove extending into the substrate from the lower face and towards the upper face, the groove comprising a top portion; and

an N-well layer positioned laterally for surrounding at least a portion of the groove.

26. (Previously Presented) The printhead of claim 25, wherein the N-well layer is positioned laterally for surrounding the top portion of the groove.

27. (Previously Presented) The printhead according to claim 26, further comprising a silicon P+ layer contacting the upper face of the substrate and overlying the top portion of the groove in the substrate, the silicon P+ layer being positioned within the N-well layer.

28. (Previously Presented) The printhead according to claim 25, wherein the substrate comprises P-type silicon.

29. (Previously Presented) The printhead according to claim 25, further comprising an insulating layer lateral to the groove and positioned on the upper face of the substrate.

30. (Previously Presented) The printhead of claim 29, further comprising an anti-cavitation layer overlying the insulating layer.

31. (Previously Presented) The printhead of claim 29 further comprising a resistor overlying the insulating layer and another insulating layer overlying the resistor.

32. (Previously Presented) The printhead according claim 25, wherein the N-well layer further includes walls which form a portion of the groove.

33. (Previously Presented) The printhead according to claim 27, in which the silicon P+ layer is electrochemically etched so as to connect the groove to the chamber for supplying ink thereto.